Paper No. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

_____

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

_____

Ex parte KARL E. GEIGER

_____

Appeal No. 1999-0074
Application No. 08/401,347

_____

ON BRIEF

_____

Before COHEN, STAAB, and CRAWFORD, *Administrative Patent Judges.*

STAAB, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's final rejection of claims 1, 6-10, and 12-16. Claims 19-21, the only other claims remaining in the application, stand withdrawn from further consideration under 37 CFR § 1.142(b) as not being readable on the elected species of the invention.

Appellant's invention pertains to a radiator assembly for

a cooling system of a heavy duty truck engine. Independent claim 1, a copy of which is found in an appendix to appellant's brief, is illustrative of the appealed subject matter.

The references of record relied upon by the examiner as evidence of obviousness are:

Jackson	3,581,814	Jun. 1, 1971
Ivy	4,926,934	May 22, 1990

Claims 1, 6-10, and 12-16 stand rejected under 35 U.S.C. § 103 as being unpatentable over Jackson in view of Ivy.

With reference to appellant's Figures 1 and 2, independent claim 1 is directed to a radiator assembly 10 comprising a radiator core 12 having a unitary, flat header flange
36 extending about the perimeter of one end of the core, a tank 14 having a unitary, flat clamping flange 38 extending about the perimeter of the tank, and a gasket 42 disposed between the clamping flange of the tank and the header flange. A key feature of appellant's invention is an improved fastening mechanism for securing the tank to the core. This

fastening mechanism comprises a unitary, flat tank torque plate 44 extending about the perimeter of the tank and disposed in mating relationship with the tank's clamping flange, a unitary, flat header torque plate 46 extending about the perimeter of the radiator core and disposed in mating relationship with the header flange, and a plurality of fasteners 50 extending through aligned apertures in the torque plates 44, 46, flanges 36, 38, and gasket 42 to secure the above together in a leakproof manner. Independent claim 16 contains similar limitations.

Jackson, the examiner's primary reference, pertains to a radiator assembly comprising a core 16 having a horizontally outwardly projecting flange 20, a tank 12 having a horizontally outwardly projecting flange 18, and a gasket 29 disposed between the flanges of the tank and the core. Jackson further includes a fastening mechanism for securing the tank to the core comprising a pair of compression straps 28 disposed in mating relationship with the flange of the radiator core, and a plurality of fasteners 26, 38 extending through slots in the compression straps and aligned apertures in the flanges and gasket for securing the above together.

Jackson's compression straps may take the form of a single piece of material having a slot cut therein (column 2, lines 28-30).

Ivy is also directed to a radiator assembly. Ivy's radiator assembly comprises a core 16 having a horizontally outwardly projecting flange 20, a tank 12 having a horizontally outwardly projecting flange 32, and a gasket 24 disposed between the flanges of the tank and the core. Ivy's fastening mechanism for securing the tank to the core comprises a series of four clamping plates 34, 36, 38, and 40 which collectively extend about and mate with the tank's clamping flange, and a plurality of fasteners 44, 46 extending through aligned apertures in the flanges 20, 32, the gasket 24, and the clamping plates 34, 36, 38, and 40.

In rejecting claims 1 and 16 as being unpatentable over Jackson in view of Ivy, the examiner implicitly finds that Jackson lacks only a unitary, flat tank torque plate disposed in mating relationship with the clamping flange 18 of the tank. It is the examiner's position, however, that it would have been obvious to modify Jackson to include this fastening element in view of Ivy's teaching at clamping plates 34, 36,

38, 40, and thereby arrive at the subject matter of claims 1 and 16.

Having carefully considered the examiner's position in light of the appealed claims, the teachings of the applied references, and appellant's arguments, we conclude that the examiner's position is not sound and that, accordingly, the standing rejection of the appealed claims should not be sustained.

As a preliminary matter, we must first consider the proper meaning to be given the term "unitary" used in appellant's claims to describe the construction of the header flange 36 extending about the perimeter of the radiator core, the tank flange 38 extending about the perimeter of the tank, and the torque plates 44 and 46 disposed in mating relationship with the tank flange and header flange, respectively. In general, words in a claim will be given their ordinary and accustomed meaning, unless it appears that the inventor used them differently, *Envirotech Corp. v. Al George, Inc.* 730 F.2d 753, 759, 221 USPQ 473, 477 (Fed. Cir. 1984), and a claim will be given its broadest reasonable

interpretation, consistent with the specification. *In re Prater,* 415 F.2d 1393, 1404, 162 USPQ 541, 550 (CCPA 1969). The dictionary[1] contains several definitions of the word "unitary" consistent with appellant's specification, and as normally applied in a structural sense, we consider that "unitary" as applied in the present application connotes a structure "having the character of a unit; not divided or discontinuous," which is a dictionary definition of that term.

Based on the above interpretation of the term "unitary" in appealed claims 1 and 16, it follows that we do not agree with the examiner's view that clamping plates 34, 36, 38, and 40 of Ivy constitute a showing of a "unitary" torque plate. Moreover, we are aware of no teaching or inference in either Jackson or Ivy, and the examiner has directed us to no such teaching or disclosure supporting an inference, which would have suggested to one of ordinary skill in the art that Ivy's clamping plates 34, 36, 38, and 40 be so constructed. Further, Jackson provides no disclosure whatsoever concerning the use of a torque plate in mating relationship with the

[1]*Webster's Third New International Dictionary* (1971).

clamping flange of the tank. In light of these deficiencies in the examiner's evidence of obviousness, we must conclude that there is no factual basis for the examiner's position that it would have been obvious to provide a "unitary" flat torque tank plate in Jackson's radiator assembly, as called for in the independent claims on appeal. This constitutes a first reason necessitating reversal of the examiner's rejection.

In addition, we do not consider that the compression strap arrangement 28 of Jackson comprises "a unitary, flat header torque plate extending continuously about the entire perimeter of one end of said radiator . . . in mating relationship with [the] header flange" as called for in each of claims 1 and 16. Rather, we perceive Jackson as providing a first compression strap 28 positioned along the front face of the radiator core and a second compression strap 28 positioned along the rear face of the radiator core. Likewise, we do not consider that the header flange 20 of Jackson extends "continuously about the entire perimeter of one end of . . . [the] radiator core" as called for in the independent claims on appeal, but that instead, it merely

extends away from the front and rear faces of the radiator core. Accordingly, even if we were to agree with the examiner that it would have been obvious to provide the radiator assembly of Jackson with a unitary flat tank torque plate in view of Ivy, the subject matter of claims 1 and 16 would not result. This constitutes a second reason necessitating reversal of the examiner's rejection.

We also do not find the deficiencies of Jackson and Ivy discussed above to be cured by reliance on case law such as *In re Larson,* 340 F.2d 965, 144 USPQ 347 (CCPA 1965), and *Nerwin v. Erlichman*, 168 USPQ 177 (Bd. Pat. Int. 1969) cited by the examiner on pages 4 and 5 of the answer. Obviousness under § 103 is a legal conclusion based on *factual evidence* (*In re Fine*, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988), and the subjective opinion of the examiner as to what is or is not obvious, without *evidence* in support thereof, does not suffice. Since the examiner has not provided a sufficient

factual basis which is supportive of his position (*see In re Warner*, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), *cert. denied*, 389 U.S. 1057 (1968)), the standing rejection of the appealed claims 1 and 16, as well as claims 6-10 and 12-16 that depend therefrom, cannot be sustained.

The decision of the examiner is reversed.

Reversed

IRWIN CHARLES COHEN Administrative Patent Judge	)	
LAWRENCE J. STAAB Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
MURRIEL E. CRAWFORD Administrative Patent Judge	)	

LJS:hh

Bliss McGlynn, P.C.
2075 West Big Beaver Road
Suite 600
Troy, MI 48084